

I CLAIM:

1. A display device comprising:
an illumination source configured to direct light along an optical
path;
5 a first color filter having a first number of color regions; and
a second color filter having a second number of color regions;
wherein the first and second color filters are configured so as to
selectively cooperate in sequentially filtering the directed light to display an
image.
- 10 2. The display device of claim 1, wherein the color regions of
the first color filter include a red region, a green region and a blue region.
- 15 3. The display device of claim 2, wherein the red region, the
green region and the blue region are of approximately equivalent size.
- 20 4. The display device of claim 2, wherein the color regions of
the second color filter include a red region, a blue region, a green region and a
white region.
- 25 5. The display device of claim 4, wherein the red region, the
green region, the blue region and the white region are of approximately
equivalent size.
6. The display device of claim 1, wherein the first and second
color filters are disposed on a carriage, the carriage being configured to
selectively position at least one of the first color filter and second color filter in the
optical path.

7. The display device of claim 1, further comprising an optical path director configured to selectively direct the optical path through one of the first color filter and the second color filter.

5 8. The display device of claim 1, wherein the first and second color filters are disposed along a single optical path.

9. The display device of claim 8, wherein the first and second color filters are coaxially coupled first and second color wheels.

10 10. The display device of claim 9, further comprising one or more sensors configured to sense respective first and second angular orientations to determine angular relationship between the first and second color wheels.

15 11. The display device of claim 9, wherein the color regions of the first color wheel include a red region, a green region and a blue region of approximately equivalent size, and wherein the color regions of the second color wheel include a red region, a green region and a blue region of approximately equivalent size and a white region of relatively smaller size.

20 12. The display device of claim 9, wherein the second color wheel is selectively fixed in a predetermined angular position while the first color wheel rotates to sequentially filter the directed light.

25 13. The display device of claim 9, wherein the color regions of the first and second color wheels each include a red region, a green region and a blue region, each separated by a white region.

30 14. The display device of claim 13, wherein the first and second color wheels are selectively fixed in a specified angular alignment relative to each other and rotate together to sequentially filter the directed light.

15. The display device of claim 14, wherein the specified angular alignment is dependent on one or more of image content, environment and user input.

5 16. A method of displaying an image comprising:
providing an illumination source;
directing light from the illumination source along an optical path;
sequentially filtering the directed light with at least one of plural cooperative color filters.

10 17. The method of claim 16, wherein sequentially filtering the directed light includes selecting a first color filter, fixing a position of a second color filter in a predetermined position in the optical path and moving the first color filter relative to the optical path.

15 18. The method of claim 16, wherein sequentially filtering the directed light includes altering the optical path to coincide with a selected one of plural color filters.

20 19. The method of claim 16, wherein sequentially filtering the directed light includes fixing the first color filter and the second color filter with respect to each other, and moving the first color filter and second color filter together.

25 20. A sequential color filter system for filtering light directed along an optical path, the sequential color filter system comprising:
a first color wheel having a plurality of color regions; and
a second color wheel having a plurality of color regions including at least one white region;

30 the first and second color wheels being configured so as to cooperate in sequentially filtering the light directed along the optical path.

21. The sequential color filter system of claim 20, further comprising a carriage whereby the first color wheel is selectively moved into and out of the optical path.

5 22. The sequential color filter system of claim 21, wherein the second color wheel is selectively moved into and out of the optical path.

23. The image display system of claim 20, wherein the first and second color wheels are coaxially coupled and disposed in the optical path.

10 24. The image display system of claim 23, wherein the second color wheel is selectively angularly fixed while the first color wheel rotates to sequentially filter the directed light.

15 25. The image display system of claim 24, wherein the first color wheel and the second color wheel are angularly fixed with respect to each other and rotate together to sequentially filter the directed light.

20 26. A display device comprising:
an illumination source configured to direct light along an optical path;

a first sequential color filter means disposed along the optical path;
and

25 a second sequential color filter means disposed along the optical path;

at least one of the first sequential color filter means and the second sequential color filter means being movable through the optical path to effect cooperative sequential filtering of the directed light to display an image.

27. The display device of claim 26, wherein the first sequential color filter means is selectively fixed relative to the second sequential color filter means.

- 5 28. A sequential color filter system for filtering light directed along an optical path, the sequential color filter system comprising:
- a first sequential color filter movable within the optical path; and
 - a second sequential color filter movable within the optical path;
- 10 the first sequential color filter and second sequential color filter each having a plurality of color regions configured to cooperatively filter light directed along the optical path.

10015643-1